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KANSAS HEALTH POLICY AUTHORITY

KANSAS HEALTH POLICY AUTHORITY
REPORT TO
JOINT COMMITTEE ON HEALTH POLICY OVERSIGHT
ON A STUDY OF
COVERAGE OF BARIATRIC SURGERY
IN
THE STATE EMPLOYEES HEALTH PLAN

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Purpose of the Study

The purpose of this study is to analyze the effects of bariatric surgery for the morbidly obese, and to make recommendations for potential state coverage of these procedures as required by SB 511. In collaboration with the Kansas Insurance Department, the Kansas Health Policy Authority examined the impact of extending coverage for bariatric surgery in the State Employee Health Benefits plan, and the affordability of coverage in the public and private sectors. The study includes emerging research evidence of the positive health impacts and risks for the morbidly obese, qualifications for the patients and the surgeons that determine when bariatric surgery is appropriate or necessary, and a cost analysis.

Introduction

Obesity in the United States and Kansas

Obesity can be defined as having a very high amount of body fat in relation to lean body mass. Individuals with a Body Mass Index, or BMI, of 30 or higher are normally considered obese. Data from the Behavioral Risk Factor Surveillance Survey show that the incidence of obesity in the United States has been increasing rapidly since 1985[1]. In 2007, the overall rate of obesity in the United States was 25.6%, which included 26.4% of men and 24.8% of women. The percentage of Kansas adults who were obese in 2007 was 26.9.

The health risks of obesity are numerous and severe. Obesity has been linked to a number of chronic diseases[2], including:

- Hypertension (high blood pressure)
- Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint)
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast, and colon).

Bariatric Surgery and Treatment Options for Obesity

Obesity treatment options can be categorized as either surgical or non-surgical. In the non-surgical category are behavioral treatment, diet modifications and drug treatment. Recently, upon the realization that for morbid obesity (i.e. weighing twice the ideal weight) the non-surgical approaches were largely ineffective, attention has turned to surgical options[3].

Bariatric surgery was first performed at the University of Minnesota in the 1950s. The procedure has since evolved, and in 1991 the National Institutes of Health issued a statement recommending that surgical options or bariatric surgery be considered for patients with morbid obesity[3]. Between 1993 and 2003, the number of surgeries performed increased from 20,000 to more than 120,000 as the procedure was increasingly seen as effective in initiating and maintaining weight loss and reducing comorbidities[3].

Bariatric procedures generally fall into two categories[4]:
1.) Restrictive (gastric banding "lapband", vertical banded gastroplasty) limits an individual's ability to ingest large quantities of food and slows the speed at which food empties from the stomach.
2.) Combination (gastric bypass with Roux-y, Duodenal Switch, or Biliopancreatic Division) procedure combines both restrictive and malabsorptive techniques. This procedure restricts food intake and bypasses the first and second segments of the small intestine. This procedure makes the stomach smaller to restrict food intake and alters digestion (bypasses sections of the small intestine).

The patient will need on-going medical care after the surgery, such as[5,6] nutritional counseling to maintain a healthy diet, physician evaluation, [6]blood work, and continued use of vitamin supplements and minerals due to malabsorption on a life long basis. If the patient loses a significant amount of weight due to the surgery, there is a potential need or request for skin reduction surgery to remove excess skin from areas such as the abdomen, arms, chin, and legs.

The Costs and Benefits of Bariatric Surgery

Cost of Surgery and Return on Investment
According to information provided by KHPA's actuaries, the charges for bariatric surgery in 2005 were over $30,000 per procedure including hospital fees. There is evidence to suggest a relatively short timeframe for return on investment, however. A retrospective case-control study that matched 3,651 bariatric surgery patients with surgery-eligible control subjects and found that, on average, total surgery costs were recovered after 53 months. This number includes a 77 month recovery period for operations performed between 1999 and 2002, and a 49-month recovery period for surgeries performed between 2003 and 2005, reflecting the improvements made during this time to both the cost-effectiveness and quality of the surgery which resulted in fewer complications[7]. Yet the results of this study should be received with prudence. An accompanying editorial[8] published with the aforementioned study in the American Journal of Managed Care cited two major shortcomings of this study: First, the return on investment estimates in the study are driven by rising costs in the matched control group rather than decreased costs from the surgery group. Second, the estimates assume a constant differential in costs between the two groups after 19 months which can only be confirmed or repudiated after the actual cost data becomes available.

Surgical Outcomes, Risks, and Quality
Short-term outcomes: [9]Research pertaining to 136 studies indicates that a significant number of individuals who had bariatric surgery experienced significant improvement, up to and including complete remediation, of four comorbidities of an overweight or obese diagnosis: diabetes, hyperlipidemia, hypertension and obstructive sleep apnea. Other studies have shown that bariatric surgery leads to large improvements in insulin insensitivity for diabetics early after surgery, even before any significant weight loss has occurred.[10]

Intermediate outcomes: [5]Two years after surgery, individuals usually have lost 50% to 60% of their excess body weight with the combination procedure and 40% to 50% with the restrictive

procedure. Some individuals experience a weight gain after 2 years which is estimated at 15% of the maximum weight loss. Weight gain is attributed to lack of remaining on the postoperative diet.

Long-term outcomes: [5,11] The Swedish Obese Subjects study, which assessed the long-run outcomes of bariatric procedures, found an average weight loss of 16% of initial body weight at 10 years. At the end of the ten years, subjects were less likely to have type 2 diabetes, hypertension, high triglycerides, or high levels of uric acid. However, this study consisted of highly motivated self-selected volunteers, so there is reason to doubt that the results apply to a broad-based population such as state employees. In any event, the results suggest that the initial weight loss associated with this class of procedures may dissipate slowly over time from an initial level of about half of their excess body weight.

Other long-term studies have shown variable results. A retrospective cohort study[12] of 9949 patients after Roux-en-Y gastric bypass surgery found a long-term decrease in mortality of 92% for diabetes-related deaths, 60% for cancer-related deaths and 56% for coronary artery disease and over the 18-year study period. However, the rates of death not caused by disease (such as death by accident or suicide) were 58% higher in the surgery group than in the control group.

Outcomes dependent on operative procedure: Two randomized clinical trials enrolling a total of 231 patients compared patient outcomes of a gastric bypass method known as Roux-en-Y with results from vertical banded gastroplasty[13]. Results showed that at 12 and 36 months after surgery patients enrolled in the Roux-en-Y gastric bypass lost substantially more weight than those assigned to vertical banded gastroplasty (42.43 kg versus 34.45kg at 12 months and 39.73 kg versus 30.65 kg at 36 months). Other studies have shown similar outcomes, resulting in the conclusion that Roux-en-Y produces greater weight loss than vertical banded gastroplasty.

Outcomes dependent upon patient characteristics
Postoperative risks:
1. [5]Acute nausea, plugging and vomiting affects approximately one to two thirds of the individuals.
2. [5]Acute gastric dumping (nausea, flushing, bloating, faintness, fatigue, and severe diarrhea) affects 50% to 70% of individuals.
3. [5, 6]Nutritional deficiencies to include anemia, osteoporosis, and metabolic bone disease affects approximately 25%-30% of individuals who undergo this procedure.
4. [6]More than one third develop gallstones.
5. [5]Mortality rate is approximately 1%.

Additional surgery:
1. [6, 14]Surgical reversal as medically necessary due to complications from the original surgery, such as obstruction or stricture.
2. [14]A previous bariatric surgical procedure may be revised or converted to another procedure due to lack of weight loss when medically necessary.

Variable quality: There are potentially significant risks associated with bariatric surgery and these risks can vary substantially across providers. Because of these risks, Medicare has

determined that it will only pay for bariatric surgery when performed at a facility they deem to be a Center of Excellence. When undergoing such a procedure as bariatric surgery, the patient should be in the hands of a skilled surgeon to ensure quality of care. [15]To qualify as an American Society for Bariatric Surgery Center of Excellence, the Center must be able to document to the Surgical Surgery Review Corporation the following:

1) Provide evidence as to resources (e.g. equipment, supplies, training of surgeons, and consultant services) available to perform surgery;
2) Excellent short and long term outcomes;
3) The center is required to have 125 bariatric cases per year or the surgeon must have 50 cases per year/125 lifetime cases.

Kansas now has three facilities that meet the coverage criteria for CMS. These centers are:

- Minimally Invasive Surgery Hospital in Lenexa
- Shawnee Mission Medical Center in Shawnee Mission
- St. Francis Health Center in Topeka.

Health Insurance Coverage of Bariatric Surgery

Medicare Coverage

Medicare announced in November of 2005 that it would begin covering bariatric surgery for beneficiaries under age 65 for open and laparoscopic Roux-en-Y gastric bypass and adjustable gastric banding. Coverage was only available under certain clinical circumstances and for facilities meeting Medicare's evidence-based standards for bariatric surgery[16]. This coverage was extended to all beneficiaries (including those over 65) in 2006[17].

Medicaid Coverage

Medicaid coverage of bariatric surgery varies by state, but the vast majority of state Medicaid programs (45 of 51) cover bariatric surgery in some capacity[18]. The six states that currently do not cover bariatric surgery are:

- Kansas
- Kentucky
- Mississippi
- Montana
- New Jersey
- Texas.

Additionally, several states exclude coverage under certain conditions. The following table compares obesity treatment coverage in all 50 states and the District of Columbia.

State Medicaid Coverage and Treatment Standards for Adults with Obesity[18]				
State	State provides specific guidance for treatment of obesity	State covers and pays for nutritional assessment and consultation	State covers and pays for drug therapy for the treatment of obesity	State covers and pays for bariatric surgery
Alabama	N	SE	SE	+[1]
Alaska	N	+P	SE	+*
Arizona	N	+	N	+
Arkansas	N	N	N	+*
California	N	SE	N	+*
Colorado	N	SE	+*	+[2]
Connecticut	N	SE	N	+
Delaware	N	+*	+*	+*
D.C.	N	N	N	+*
Florida	N	SE	N	+C
Georgia	G	+	SE	+*
Hawaii	N	SE	N	+*
Idaho	N	+C	N	+C
Illinois	N	SE	N	+[3]
Indiana	N	+	+	+
Iowa	N	+	+*	+*
Kansas	N	SE	+	SE
Kentucky	N	+	N	SE
Louisiana	N	+	+	+
Maine	N	+	N	+*
Maryland	N	N	N	+*
Massachusetts	N	N	N	+[4]
Michigan	N	+P	N	+C
Minnesota	N	+	+*	+*
Mississippi	N	+	+*	SE
Missouri	N	+C	N	+[5]
Montana	N	SE	N	SE[6]
Nebraska	N	SE	N	+[7]
Nevada	N	+	N	+[8]
New Hampshire	N	SE	N	+[9]
New Jersey	N	SE	N	SE
New Mexico	N	SE	N	+*
New York	N	N	N	+[10]
North Carolina	N	+	N	+*[11]
North Dakota	N	+L	N	+*
Ohio	N	SE	SE	+*
Oklahoma	N	+	SE	+12
Oregon	N	+P	N	+*
Pennsylvania	N	+	N	+*

State Medicaid Coverage and Treatment Standards for Adults with Obesity[18]				
Rhode Island	N	+	N	+*
South Carolina	N	+C	+*	+
South Dakota	N	SE	N	+[13]
Tennessee	N	SE	N	+[14]
Texas	N	SE	N	SE
Utah	N	SE	N	+*
Vermont	G[15]	+	N	+*
Virginia	N	+P	+*	+*
Washington	N	+P	SE	+
West Virginia	N	SE	N	+*
Wisconsin	N	+L	+*	+
Wyoming	N	SE	SE	+[3]

Symbol	Meaning
N	State manual provides no guidance or does not mention specific service or treatment
G	State manual provides detailed guidance for treating adult obesity
SE	Specified service is specifically excluded
+	State covers and reimburses for specified service
*	Prior authorization required
P	Services provided as part of prenatal care only
C	Services only considered if comorbid condition exist
L	Services are specifically limited in some way

1. Alabama will not cover Gastric Bypass for patients with a history of a previous Gastric Bypass procedure.
2. Colorado does not reimburse for CPT code 43845.
3. Illinois and Wyoming approve gastric bypass on a case-by-case basis.
4. Massachusetts will not cover CPT codes 43842, 48343, or 43845.
5. Missouri will not cover SPT codes 43770, 43771, 43772, 43773, or 43774.
6. Montana has no CPT codes for obesity surgery in its fee schedule nor does it mention obesity in its provider manual.
7. Nebraska excludes lleal bypass and intestinal surgery and will not cover other surgeries when the sole diagnosis is obesity.
8. Nevada excludes intestinal bypass and gastric balloon.
9. New Hampshire does not cover CPT codes 43645 or 43845.
10. New York does not cover CPT code 43845.
11. North Carolina does not cover investigational procedures including jejunoileal bypass, biliopancreatic bypass, gastric wrapping, gastric banding, jejunocolostomy, and mini-gastric bypass.
12. Oklahoma does not include CPT codes 43842 or 43843 in its fee schedule.
13. South Dakota does not cover CPT codes 43644, 43645, 43770, 43771, 43772, 43773, 43774, 43845, or 43848.
14. Coverage offered through TennCare, Tennessee's managed care program. It is unclear if this service is covered through traditional fee for service Medicaid.
15. Vermont does not include obesity treatment language in its provider manual. However, the state offers an extensive adult obesity toolkit at their website: http://healthvermont.gov/.

Bariatric surgery is also covered by a few private health plans, although coverage varies by plan type and location.

Cost to State Employee Health Benefit Plan

During the 2008 Kansas Legislative Session, KHPA prepared an estimate of the cost to include bariatric surgery in the State Employee Health Plan (SEHP). We estimated the surgical costs for 2008 to be $12,750,000. This amount would have covered 425 such surgeries without any limitations on such surgeries (unlike Medicare and other private insurance). For 2010, our estimate is increased to $14,598,000 to account for a 4.5% annual pricing trend and an increased number of utilizers.

These estimates are based on crude population-based estimates of the prevalence of obesity in the state employee population, since no direct measures are available. In addition, the estimates represent an upper bound since they presume the application of only the minimal, Medicare-based criteria to coverage of the surgery. Other insurers and several state Medicaid programs target surgeries at a smaller population of those who would benefit most. Gross expenditures for bariatric surgery under the state employee plan would depend upon the eligibility criteria selected by the Health Care Commission, and could thus be less than the estimates above.

In addition, new research supports the identification of offset savings to the health plan due to the ongoing health improvements of those who have had the surgery. Research summarized above indicates full payback of surgical costs in as little as four years. These savings would be more likely if the surgery were targeted at a smaller group, where the health risks of obesity and the likelihood of successful post-operative compliance with ongoing treatment are highest. A key offset to the documented savings from surgery-related health improvements is the fact that employees who receive SEHP-covered bariatric surgery will leave the plan at some point in the future (at retirement, if not sooner), taking their improved health and offset savings with them. It is also possible that the prospect of receiving bariatric surgery could attract employees into state service, and that some of those employees might leave state service sooner than might otherwise occur.

Taking all of these factors into account introduces many uncertainties into estimates of the overall financial impact of bariatric coverage in the state employee health plan. Financial models of these net impacts suggest that bariatric surgery would increase state employee health expenditures in the first two to three years as the high up-front costs of surgery are incurred for all currently-eligible employees who wish to take advantage. Surgical costs would decline in future years as utilization fell to include only those newly eligible due to increasing weight, new employment, etc. Offset savings due to improved health would grow steadily for several years as the cumulative number of employees with the surgery – and who would otherwise be incurring higher obesity-related health care costs – would increases. Annual net costs would likely to savings in as few as three or four years. Cumulative costs would turn to long run total savings within about 10-12 years. Cumulative savings in the second decade of coverage could reach into the tens of millions of dollars based on the promising research results that have become available in the two years. The assumptions underlying these estimates need to be reviewed by medical care experts before taking any action, but suggest that a modest short-term

investment in bariatric surgery would result in substantial long-run improvement in the health of covered employees and the financing of state employee health benefits.

Eligibility Criteria in Public and Private Health Plans

[19]Medicare

In order for a bariatric surgery to be covered by Medicare, Medicare requires the patient to have a Body Mass Index equal to or greater than 35 (e.g. 200 lbs. for a 5'5" person). The individual must also have at least one of the following associated diseases: Hypertension, Type II diabetes, degenerative joint disease involving the lower back, hips, knees, ankles, or feet, gastroesophageal reflux, sleep apnea, obesity hypoventilation syndrome, female sexual hormone dysfunction including the syndrome of polycystic ovaries, amenorrhea, hirsutism, or (Stein-Leventhal syndrome), urinary incontinence or pseudotumor cerebrii.

Prior to being considered as a candidate for surgery, the patient must undergo prerequisite treatment, including: Dietary education and evaluation, pharmacological management and a psychological evaluation. The patient must also agree to post-operative care that includes medical/surgical management, dietary counseling and planning, and psychological counseling where it is medically necessary.

[14]Cigna

In order for bariatric surgery to be covered, Cigna requires the patient to have the following conditions:
The patient's BMI must be 40 or greater for at least one year *or* a BMI of between 35 and 39.9 for at least one year with one or more co-morbidities (type 2 diabetes, hypertension, hyperlipidemia, coronary artery disease, or sleep apnea) that have failed to respond to nonsurgical treatment methods. Additionally, the patient must be at least 18 years of age and/or have obtained full skeletal growth, have documented participation and compliance in a weight-loss program for at least 6 months (again, participation must have occurred within the last one to two years) and a medical, psychological and nutritional evaluation.

[20]Minnesota Medicaid

The Minnesota Medicaid program has different coverage criteria for adult and adolescent surgery candidates. For adults, the patient must either have a BMI of 40 or higher *or* a BMI of 35-40 with one or more comorbidities (severe cardiac disease, type 2 diabetes, obstructive sleep apneas and other respiratory disease, pseudo-tumor cerebri, gastroesophageal reflux disease, hypertension, hyperlipidemia, or severe joint or disc disease that interferes with daily functioning). The BMI level must have persisted for at least two years before the operation.

For adolescents, the patient must either have (1) a BMI of 40 or higher with one or more comorbidities, including type 2 diabetes, obstructive sleep apnea, pseudotumor cerebri, or severe or complicated hypertension, *or* (2) a BMI of 50 or higher with one or more comorbidities including hypertension, dyslipidemias, nonalcoholic steatohepatitis, venous stasis disease, significant impairment in activities of daily living (ADL), intertriginous soft-tissue infections, stress urinary incontinence, gastroesophageal reflux disease, arthropathies in weight-bearing

joints, or obesity-related psychosocial distress. The recipient must have attained physiologic maturity as measured by reaching Tanner stage IV development and 95% of adult height.

For both adults and adolescents, the patient must have made at least one serious medically supervised attempt of at least six months' duration to lose weight in the past. The patient is also required to provide a written statement of their current eating habits and complete a full medical and psychiatric examination prior to surgery. Minnesota Medicaid is unique in requiring a signed statement by the patient detailing the patient's commitment to lose weight, expectations of the surgical outcomes, willingness to make permanent lifestyle changes and participate in a long-term postoperative care plan. A similar statement of support is required from the custodial parent or guardian for all adolescent patients.

Recommendations

Given the demonstrated safety and efficacy of the procedures, which improve the quality of life, reduce long-run costs, and reduce mortality, KHPA plans to develop recommendations for the HCC that will provide limited coverage of bariatric surgery in the SEHP. Recommendations will be based on the input of medical professional to identify specific coverage criteria that will result in the targeting of this surgery to those who can benefit most, thereby improving health outcomes and reducing costs to the State.

The criteria may begin with the criteria adopted for coverage within Medicare, which require performance of the surgery at a Center for Excellence, and failure at other weight-reduction methods, along with a signed commitment by the patient to follow through with all after-care recommendations. KHPA will plan to seek counsel from those with expertise in weight loss and bariatric surgery to develop initial coverage criteria to be recommended to the Health Care Commission (HCC), the governing body with direct responsibility for determining SEHP benefits. Future consideration of coverage within Medicaid will depend upon the availability of state funds for the initial investment phase of coverage.

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STUDY OF IMPACT OF EXTENDING COVERAGE FOR BARIATRIC SURGERY IN THE SMALL BUSINESS EMPLOYER GROUP AND THE HIGH RISK POOL

Kansas Insurance Department

October 31, 2008

PREFACE

House Bill No. 2672

HB 2672 was an act concerning the Kansas health policy authority that amended K.S.A. 38-2006, 39-968 and 65-435a, repealing the existing sections; and also repealed K.S.A. 46-2507.

One of the issues considered by the Legislature was the medical and societal epidemic of obesity and the potential for higher mortality rates for individuals with obesity and the economic impact on medical expenses. In New Section 1 of HB 2672 the Legislature requested that the Kansas health policy authority conduct a study on the topic of bariatric surgery and a study on the impact of extending insurance coverage for bariatric surgery. **In conducting the study on the impact of extending insurance coverage for bariatric surgery, the authority was directed to collaborate with the commissioner of insurance ("Commissioner") with regard to the affordability of coverage in the small business employer group and the high risk pool.**

Study Process

The Commissioner's study process incorporated the following six activities:

1. A survey of the 25 insurers licensed to sell small group coverage in Kansas.

2. Review and analysis of the responses provided by 13 insurers, including costs, potential economic impact on premiums, and related comments.

3. A request for benefits and cost information from the third party administrator and utilization review organization for the Kansas Health Insurance Association (the Kansas high risk pool) regarding coverage for bariatric surgery provided to its members.

4. A request for input from the consulting actuary for KHIA regarding the impact of costs for bariatric surgery on premiums.

5. Review and analysis of the benefits and cost information provided by KHIA's third party administrator, utilization review organization, and consulting actuary.

6. Internet research to obtain national data regarding costs and risk of complications for bariatric surgery.

PART I - AFFORDABILITY OF COVERAGE IN THE SMALL GROUP MARKET

Introduction

The Commissioner conducted a survey of all 25 insurance companies currently licensed to sell small group coverage in Kansas by posing the following question: "What would be the impact on premiums if coverage for bariatric surgery was provided in the small group market?

The Commissioner received complete responses from 13 insurers, all of whom expressed reservations about providing a definitive response to the question in the absence of specific information regarding the specific amount and type of benefits to be provided and the criteria or factors to be used to determine the medical necessity for bariatric surgery services. In addition, they were reluctant to attempt to calculate the possible economic impact on premiums with no reliable data to suggest the number and type of procedures that might be requested by their insureds. The insurers who provided incomplete responses expressed an inability to provide a meaningful or accurate answer to the question posed in the absence of such information. Those insurers who provided complete responses stated that the economic impact on premiums would likely increase dramatically if the demand for costly bariatric surgery procedures and services became significant once coverage was provided.

Demand

All insurers confirmed that coverage for bariatric surgery is currently not provided in the small group market but is available to large groups and self-funded employers. They indicated they receive very few requests for or inquiries about bariatric surgery from their insureds, which may be due, at least in part, to the general knowledge among insureds that weight loss benefits are generally excluded from coverage. However, the insurers also acknowledged they receive frequent inquiries from their contracting providers regarding the possibility of coverage for bariatric surgery. Under these circumstances it would be difficult to project the level of demand for bariatric surgery services if coverage were made available to small groups.

Cost of Treatment

The insurers indicated a cost of $10,000 to $25,000 for bariatric surgery, depending on the type of procedure performed and associated costs, with a lower cost for procedures such as gastric banding (LAP-BAND) and higher costs for more invasive procedures such as gastric bypass. In data submitted to the Kansas Health Insurance Information System (KHIIS) by all insurers, for calendar years 2002 through 2007, 143 patients received insurance benefits for bariatric surgery during this six year period for total provider charges of approximately $6.5 million, including surgical fees, anesthesiologist charges and associated hospital fees, and actual benefits paid in the amount of $2.3 million. The average provider charge per patient was $45,428 with an average benefit payment of $16,371. The costs reported in response to the

Commissioner's survey and the KHIIS cost data do not include any costs related to any subsequent treatment or care required due to complications following bariatric surgery.

A study released by the U.S. Department of Health & Human Services in 2006 reported that four of every 10 obesity surgery patients experience complications within 6 months following surgery, including dumping syndrome, which includes vomiting, reflux, and diarrhea, anastomosis complications (resulting from the joining of the intestine and stomach), such as leaks or strictures, abdominal hernias, infections, and pneumonia. The study reported medical care spending for patients experiencing complications averaged $36,542, including their initial hospital stay, while spending for patients without complications averaged $25,337. For patients requiring hospital readmittance due to complications, costs averaged $65,031.[20]

Impact on Premiums

The 13 insurers who responded estimated an increase in premiums in the range of 1/2% to 8%, for an average of 3.07% for the group. However, as stated above, the insurers indicated that these percentages could prove to be inadequate based on the demand for bariatric surgery services and the incidence of complications and their related costs. These estimates appear to be consistent with the 1% to 3% impacts experienced by the four states that currently mandate coverage for morbid obesity treatment.[20]

PART II - KANSAS HEALTH INSURANCE ASSOCIATION (KHIA) (KANSAS HIGH RISK POOL)

The Kansas Health Insurance Association

The Kansas Health Insurance Association is a nonprofit legal entity created by the Kansas Legislature pursuant to the Kansas uninsurable health insurance plan act of 1992, K.S.A. 40-2117, *et seq.* Under its plan of operation KHIA provides health care benefits for Kansas residents who are unable to purchase health insurance or obtain coverage for an existing medical condition, who have exhausted their health insurance benefits, who have been quoted insurance rates more than the KHIA rate, or otherwise qualify under the federal Health Insurance Portability and Accountability Act (HIPAA).

As of August 31, 2008 KHIA had 1,907 members in 11 plans, with deductibles ranging from $500 to $10,000 per year. KHIA provides comprehensive benefits comparable to those offered in the commercial individual market, including prevention services, inpatient hospital care, maternity, emergency room, mental health/substance abuse, home health care, and prescription drug benefits, with an individual lifetime maximum benefit of $2,000,000. For plan year 2007 KHIA paid benefits totaling $18.7 million.

Coverage for Bariatric Surgery

Under the standard benefit provisions of the KHIA policy, the "treatment of obesity" is excluded from coverage unless the treatment is determined to be "Medically Necessary" by KHIA's utilization review organization ("URO"). The term "Medically Necessary" is defined in the policy as

> a service or supply that:
>
> (a) is appropriate and consistent with the diagnosis in accordance with generally accepted standards of medical practice as determined by a Utilization Review Organization;
>
> (b) is not considered Experimental or Investigative;
>
> (c) could not have been omitted without adversely affecting the Insured person's condition or quality of medical care; and
>
> (d) is the most appropriate supply or level of service that can be provided on a cost effective basis.

Utilization Review Organization Determination Process

When a health care provider seeks pre-certification for a bariatric surgery procedure for the KHIA member/patient, such as gastric bypass or gastric banding, the provider is required to submit the following information to the URO for a determination of medical necessity:

- Medical records from the previous six months, relating to the patient evaluation and treatment to date, including diagnostic lab work (must include glucose and thyroid studies). The testing done should have been performed within the previous six months.
- A detailed history that includes co-morbidities.
- A psychosocial/psychiatric evaluation that documents patient understanding of the procedures and needed follow-up care
- The surgical approach and any additional procedures requested, including post-operative needs such as nutritional and psychological support, and weight, exercise and diet monitoring
- Documented current height, weight and BMI
- Six months of documented exercise regimen (including dates and results)
- Six months of physical - dietician monitored diet program (including dates and results)

- Physician verification that patient is a minimum of 100 pounds above the weight indicated by Federal guidelines

In addition to reviewing the information provided above, the URO also considers the following factors in making a determination of medical necessity[20]:

- Patient has a BMI of 40 or greater
- Patient has a BMI of 35 or greater and a clinically serious condition exists (e.g., obesity hypoventilation, sleep apnea, diabetes, hypertension, cardiomyopathy, musculoskeletal dysfunction)
- Patient's failure to lose weight significantly or regaining of weight despite compliance with a multidisciplinary nonsurgical program, including low- or very low-calorie diet, supervised exercise, behavior modification, and support, with possible medication
- No specifically correctable cause for obesity (e.g., an endocrine disorder)
- Full growth
- Patient is receiving treatment in a surgical program experienced in obesity surgery, characterized by surgeons experienced with gastric bypass and a multidisciplinary approach, including all of the following:
  - Preoperative medical consultation and approval
  - Preoperative psychiatric consultation and approval
  - Nutritional, exercise, and psychological counseling

Financial Impact

From January 1, 2005 through September 30, 2008 (almost four plan years), KHIA paid benefits for bariatric surgery, including both gastric bypass and gastric banding (LAP-BAND) for nine members at a total cost of $95,508.34, for surgical fees, hospital fees, and anesthesia, for an average of $10,612 per procedure. The range of costs for these nine patients was $2,897 to $41,130, with the difference in range attributable to whether the patient underwent the a less expensive procedure, such as lap-banding, or the more invasive gastric bypass procedure and whether the patient had other health conditions which required additional treatment or care at the time of the bariatric procedure. These figures reflect the amount paid after the application of patient deductibles, co-insurance, and the negotiated discount with the provider. The actual amount charged by the providers for these procedures was $233,095, for an average charge of $25,899. The range for those charged amounts was $8,454 to $114,073. These figures do not reflect any subsequent costs incurred for these patients in the weeks and months following their bariatric surgery due to complications.

KHIA's consulting actuary indicated that given the limited number of bariatric surgery procedures covered by KHIA over the past four plan years, there has been no significant impact on member premiums. However, if the criteria and documentation required to determine medical necessity for these procedures were relaxed or reduced KHIA might be expected to

experience increased costs, and resulting increases in premiums, due to greater numbers of procedures being approved and performed.

PART III - REINSURANCE ISSUES

Information regarding reinsurance coverage for high medical costs experienced by small groups has been previously provided to the Legislature in conjunction with other studies and requests for information.[20] However, the types of reinsurance previously described - prospective (before costs occur) or retrospective (after costs occur) - and the financing of the cost of such reinsurance, either by small group insurers paying for the cost of reinsurance through premiums or assessments or the state paying all or some portion of the cost as a subsidy to the small group insurance market through the use of state general funds, or other taxes could be used to cover the costs for bariatric surgery.

REFERENCES

[20] William Encinosa, Ph.D., Didem Bernard, Ph.D., & Claudia Steiner, M.D., M.P.H., *Obesity Surgery Complication Rates Higher Over Time*, U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, July 24, 2006, *available at* http://www.ahrq.gov/news/press/pr2006/obessurgpr.htm

[20] Victoria Craig Bunce & JP Wieske, JP, *Health Insurance Mandates in the States 2008*, Council for Affordable Health Insurance, *available at* http://www.cahi.org/cahi_contents/resources/pdf/HealthInsuranceMandates2008.pdf

[20] Milliman Care Guidelines, *Inpatient and Surgical Care*, 12th Edition

[20] Robert St. Peter, Ron Liebman, Gina Maree, Sarah Carkhuff Fizell, Kansas Health Institute, *Reinsurance in Kansas: Background, Policy Issues and Recommendations*, February 14, 2008 (presentation to Joint Session of the House Insurance and Financial Institutions and Senate Financial Institutions and Insurance Committees)